

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF THE CLAIMS:

1- 6. (Canceled)

7. (Previously Presented) A data transmission path arrangement, comprising:

an enabling device;

a device for checking a data integrity of data transmitted from a sender side to a receiver side of the data transmission path;

a first data modification device located on the sender side;

a second data modification device located on the receiver side, the first data modification device and the second data modification device each have the same transmission function effecting a modification of input data into output data and are connected to the data transmission path; and

a comparator located on the receiver side and connected to the data transmission path and the second data modification device;

wherein the comparator compares the output data supplied by the first data modification device and the second data modification device via the data transmission path,

wherein the comparator activates the enabling device when the output data of the first data modification device and the second modification device are identical, and

wherein a transmission of the input data, generated on the sender side, to the first data modification device and a transmission of identical input data to the second data modification device via the data transmission path occur on the data transmission path.

8. (Previously Presented) The data transmission path arrangement as recited in Claim 7, wherein the input data are sent essentially simultaneously in a direction of the first and the second data modification devices.

9. (Previously Presented) The data transmission path arrangement as recited in Claim 7, wherein the data transmission path includes at least one communication channel corresponding to a CAN (Controller Area Network) communication channel.

10. (Previously Presented) The data transmission path arrangement as recited in Claim 9, wherein the output data generated by the first data modification device and the input data supplied to the second data modification device are transmitted via a common communication channel of the data transmission path.

11. (Previously Presented) The data transmission path arrangement as recited in Claim 7, wherein the enabling device enables an operation of an actuator.

12. (Previously Presented) The data transmission path arrangement as recited in Claim 11, wherein the actuator includes a brake.

13. (Currently Amended) A method for checking a data integrity of data transmitted from a sender side to a receiver side of a data transmission path, comprising:

modifying input data into first output data by a first data modification device, on the sender side, having a transmission function;

supplying the first output data to a comparator, located on the receiver side and connected to the data transmission path and the second data modification device, via the data transmission path;

supplying, via the data transmission path, the identical input data to a second data modification device, on the receiver side, having the same transmission function;

modifying the identical input data into second output data by the second data modification device;

supplying the second output data to the comparator, which compares the output data supplied by the first data modification device and the second data modification device via the data transmission path; and

outputting by the comparator an activation signal when the first and the second output data are identical;

wherein a transmission of the input data, generated on the sender side, to the first data modification device and a transmission of identical input data to the second data modification device via the data transmission path occur on the data transmission path.

14. (Previously Presented) The method as recited in Claim 13, wherein the data transmission path is in a motor vehicle.

15. (Previously Presented) The data transmission path arrangement as recited in Claim 7, wherein the data transmission path is in a motor vehicle.

16. (Previously Presented) The data transmission path arrangement as recited in Claim 7, wherein the data transmission path arrangement is a wireless connection path arrangement.

17. (Previously Presented) The data transmission path arrangement as recited in Claim 7, wherein the input data is split into two similar but separate input data signals and transmitted to the first and the second data modification device accordingly.

18. (Previously Presented) The data transmission path arrangement as recited in Claim 7, wherein the first data modification device and the second modification device generate matching output data when they are supplied with matching input data.

19. (Previously Presented) The data transmission path arrangement as recited in Claim 7, wherein the input data are sent essentially simultaneously in a direction of the first and the second data modification devices, wherein the data transmission path includes at least one communication channel corresponding to a CAN (Controller Area Network) communication channel, wherein the output data generated by the first data modification device and the input data supplied to the second data modification device are transmitted via a common communication channel of the data transmission path.

20. (Previously Presented) The data transmission path arrangement as recited in Claim 19, wherein the enabling device enables an operation of an actuator, and wherein the actuator includes a brake.

21. (Previously Presented) The data transmission path arrangement as recited in Claim 19, wherein the data transmission path arrangement is a wireless connection path arrangement, wherein the input data is split into two similar but separate input data signals and transmitted to the first and the second data modification device accordingly, and wherein the first data

U.S. Patent Application No. 10/572,697
Attorney Docket No. 10191/4475
Response to Office Action of January 15, 2010

modification device and the second modification device generate matching output data when they are supplied with matching input data.

22. (Previously Presented) The data transmission path arrangement as recited in Claim 21, wherein the enabling device enables an operation of an actuator, and wherein the actuator includes a brake.

23. (Previously Presented) The data transmission path arrangement as recited in Claim 7, wherein the data transmission path arrangement is a wireless connection path arrangement, wherein the input data is split into two similar but separate input data signals and transmitted to the first and the second data modification device accordingly, and wherein the first data modification device and the second modification device generate matching output data when they are supplied with matching input data.

24. (Previously Presented) The data transmission path arrangement as recited in Claim 23, wherein the enabling device enables an operation of an actuator, and wherein the actuator includes a brake.